

IN THE DRAWINGS

The attached sheet of drawing includes changes to Fig. 1. This sheet, which includes FIG. 1, replaces the original sheet including FIG. 1.

Attachment: Replacement Sheet (1 sheet)

REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-42 are pending in the present application. Claims 1, 2, 26, 27, 29, 31, 33, 35, 37, and 40 are amended by the present amendment.

In the outstanding Office Action, the drawings were objected to; Claims 26, 27, 33, and 35 were rejected under 35 U.S.C. § 102(b) as anticipated by Sirkis et al. (International Application WO 01/37306, herein Sirkis); Claims 1, 2, 8, and 11 were rejected under 35 U.S.C. § 103(a) as unpatentable over Sirkis in view of Williams (U.S. Patent No. 6,133,795); Claims 3-6, 12-18, and 25 were rejected under 35 U.S.C. § 103(a) as unpatentable over Sirkis in view of Williams and Linley et al. (U.S. Patent No. 6,766,279, herein Linley); Claim 7 was rejected under 35 U.S.C. § 103(a) as unpatentable over Sirkis in view of Williams and Fujii (U.S. Patent No. 5,936,481); Claims 9 and 10 were rejected under 35 U.S.C. § 103(a) as unpatentable over Sirkis in view of Williams, Strang (U.S. Patent Application Publication No. 2004/0267547); Claims 19-23 were rejected under 35 U.S.C. § 103(a) as unpatentable over Sirkis in view of Williams and Linley and Torii et al. (Japanese Patent Application No. JP 03263828); Claims 28, 36, and 40-42 were rejected under 35 U.S.C. § 103(a) as unpatentable over Sirkis in view of Linley; Claim 29 was rejected under 35 U.S.C. § 103(a) as unpatentable over Strang in view of Fujii; Claims 30-32 were rejected under 35 U.S.C. § 103(a) as unpatentable over Strang in view of Fujii and Linley; Claims 37-39 were rejected under 35 U.S.C. § 103(a) as unpatentable over Strang in view of Linley; and Claims 24 and 34 were indicated as allowable if rewritten in independent form.

Applicants thank the Examiner for the indication of allowable subject matter. However, in view of the claim amendments, dependent Claims 24 and 34 are maintained in dependent form.

Applicants also thank the Examiner for the courtesy of an interview extended to Applicants' representative on April 20, 2006. During the interview, the differences between the claims and the applied art were discussed. Further, clarifying claim amendments, similar to those presented herewith, were also discussed. The examiner indicated he would further review the amended claims in view of a filed response. Arguments presented during the interview are reiterated below.

Regarding the objection to the drawings, Figure 1 has been amended to replace reference sign 10 with 30 as disclosed in the specification for example at page 7, paragraph 38. No new matter has been added. Accordingly, it is respectfully requested this objection be withdrawn.

Regarding the outstanding rejections on the merits, independent Claims 1, 26, 29, 33, 37, and 40 have been amended to recite a user interface programmable to select at least one monitoring function and at least one controlling function. The claim amendments find support in Figure 1 and its corresponding disclosure in the specification, and also in paragraph [0051]. No new matter has been added.

Briefly recapitulating, independent Claim 1 is directed to a diagnostic system for plasma processing. The system includes a multi-modal resonator, a power source, a detector, a controller, and a user interface connected to the controller. The user interface is programmable to select at least one monitoring function and at least one controlling function that are provided by the controller. In a non-limiting example, Figure 1 shows the diagnostic system 1 having the multi-modal resonator 35, the power source 60, the detector 70, the controller 80, and the user interface 82 connected to the controller 80. In another non-limiting example, Figure 4 shows the user interface having the capability to select at least one monitoring function and at least one controlling function.

Turning to the applied art, Sirkis shows in Figure 3 a voltage control oscillator 103 connected to a resonator 105, a detector 106, and a bias signal processor 101, which is asserted by the outstanding Office Action to correspond to the claimed controller. However, as discussed during the interview, Figure 3 of Sirkis does not teach or suggest a user interface connected to the processor 101 as required by amended Claim 1.

The outstanding Office Action states that Figure 5 of Sirkis shows a data input 110 that corresponds to the claimed man-machine interface recited in Claim 2. However, the data input 110 shown in Figure 5 of Sirkis is described in the paragraph bridging pages 11 and 12 of Sirkis as being either a keyboard or a potentiometer. As discussed during the interview, neither the keyboard nor the potentiometer is a programmable interface capable of selecting at least one monitoring function and at least one controlling function. It is noted that the potentiometer of Sirkis can select only one function.

Strang shows in Figure 1A an equipment status monitoring system having a plasma processing chamber 20, a power source 60, a detector 70, and a control system 80. However, Strang does not teach or suggest any user interface or an interface programmable to select at least one monitoring function and at least one controlling function as required by the amended independent claims.

The other applied references have been considered but none of them cures the deficiencies of Sirkis discussed above.

Accordingly, it is respectfully submitted that independent Claims 1, 26, 29, 33, 37, and 40 and each of the claims depending therefrom patentably distinguish over the applied art.

Consequently, in light of the above discussion and in view of the present amendment, the present application is believed to be in condition for allowance and an early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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